OSHA Implementation of the Globally Harmonized System

The GHS Journey Continues...

Why is the GHS needed?

- No country has the ability to identify and specifically regulate every hazardous chemical product
- For example, in the United States, there are an estimated 945,000 such products
- Adoption of requirements for information to accompany the product helps address protection needs

Why? (cont.)

- Countries with systems that address these needs have adopted different requirements for hazard definitions as well as information to be included on a label or material safety data sheet.
- This impacts both protection and trade.

Why does the US need it?

- The US has regulatory requirements that address concerns in different sectors
- They are not domestically harmonized—each Agency has pursued independent regulations that differ from each other
- Domestic producers have to classify and label multiple times for the same product

Why does OSHA need it?

- OSHA's Hazard Communication Standard (HCS) has performance-oriented requirements for labels and safety data sheets
- Hazard communication is often inconsistent as a result
- Users of labels and safety data sheets would prefer a standardized approach
- Adoption of the GHS would address this domestic concern

Global Benefits of Harmonization

- Countries, international organizations, chemical producers and users of chemicals all benefit.
  - Enhance protection of humans and environment.
  - Facilitate international trade in chemicals.
  - Reduce need for testing and evaluation.
  - Assist countries and international organizations to ensure the sound management of chemicals

How We Got Here

- Commitment in the preamble to the final standard in 1983.
- Years of bilateral trade negotiations.
- International mandate adopted in 1992.
- Negotiations to complete the GHS in several international organizations for the next 10 years.
- System now available for adoption.

International Activities

- The European Union has developed a detailed proposal and impact analysis. It is available on the web. Public comments are being accepted until October 21, 2006.
- http://ec.europa.eu/enterprise/reach/ghs_consultation_en.htm

International Activities, cont.

- Australia has also made proposed requirements available for comment until 1 February 2007.
- http://www.ascc.gov.au/ascc/AboutUs/PublicComment/OpenComment/WorkplaceHazardousChemicalsPublicComment.htm

International Activities, cont.

- Japan recently completed a comment period on proposed requirements for workplace chemicals.
- Canada has made a sectoral analysis available that indicates how the GHS will be applied:

http://www.hc-sc.gc.ca/ahc-asc/pubs/ghs-sgh/index_e.html

International Activities, cont.

- A number of countries have undertaken pilot projects on implementation of the GHS. These are in various stages of completion, and include Zambia, South Africa, Senegal, Indonesia, Thailand, the Philippines, Cambodia, and Laos.
- Mexico, Brazil, Argentina, and other Western hemisphere countries are actively pursuing implementation as well.

Development of the GHS

- US supported the process and actively participated.
- Multiple international organizations involved.
- Stakeholders (industry and labor) represented in both the negotiation and implementation processes.

GHS Requirements

- Health, physical and environmental hazard criteria for substances and for classification of mixtures
- Provisions for communicating information on labels (including harmonized pictograms, hazard statements, and signal words)
- A 16-section safety data sheet

Allocation of Label Elements

CARCINOGENICITY				
Category 1A	**Category 1B**	**Category 2**	-	-
Danger **May cause cancer** (*state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard*)	**Danger** **May cause cancer** (*state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard*)	**Warning** **Suspected of causing cancer** (*state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard*)		
Not required under the *UN Recommendations on the Transport of Dangerous Goods, Model Regulations.*				

US Agencies Affected by GHS

- Environmental Protection Agency (EPA)
  - Pesticides Program
- Department of Transportation
  - Hazardous Materials Regulations
- Consumer Product Safety Commission (CPSC)
- Occupational Safety and Health Administration (OSHA)

Activities of Other Agencies

- EPA—White Paper on Implementation; situational analysis; stakeholder workshop October 18-19, 2006.
- DOT—Plan to adopt regulatory changes in 2007, implement by 2008.
- CPSC—Beginning work on situational analysis.

OSHA's Current Activities

- Represent US in the UN Subcommittee of Experts on the GHS.
- Awareness raising.
  - Presentations at meetings of trade associations, consensus standards committees, and professional societies.
  - Web page on the GHS.

Current Activities, cont.

- Situational analysis:
  - OSHA has had a detailed comparison completed of the HCS to the GHS.
  - The comparison is available on our web page.
- Coordination with other agencies:
  - We continue to participate in interagency discussions about implementation.

Current Activities, cont.

- International coordination:
  - OSHA and Health Canada conducted a workshop on the GHS in Mexico City as part of NAFTA discussions regarding handling of hazardous substances in the workplace.
  - OSHA and the European Commission discussed GHS implementation at a joint conference on occupational safety and health in September 2005 and completed a pilot project related to the GHS.

Regulatory Agenda

- In the May 16, 2005, semi-annual regulatory agenda, OSHA indicated that it was adding modification of the Hazard Communication Standard to adopt the GHS.
- On September 12, 2006, OSHA completed the first step by publishing an advance notice of proposed rulemaking (ANPR).

What is an ANPR?

- An ANPR is a document in the Federal Register that describes what the Agency is working on, and gives the public an opportunity to provide input in the form of written comments.

GHS Journey

- After many years of negotiations to develop the GHS, the ANPR is the first step in the process to adopt it and make it mandatory in US workplaces.
- The US regulatory process includes a number of required activities, as well as analyses to support the process.

Regulatory Process

- Rulemaking Steps
  - ANPR
  - Notice of Proposed Rulemaking
    - Public Comment Period
    - Public Hearing
    - Post-hearing Comment Period
  - Final Standard
  - Phase-in Period for Compliance

Analytical Requirements

- Economic Feasibility
- Technological Feasibility
- Paperwork Burden
- Impact on Small Businesses (Small Business Regulatory Enforcement Fairness Act process)
- Peer Review

The GHS Isn’t…

- A model regulation or a standard that can simply be adopted. It has criteria or provisions and explanatory text. Countries and authorities will choose those parts of the system that apply to their sphere of regulation, and prepare implementing text consistent with their own requirements.

Impact on OSHA Requirements

- Hazard Communication Standard includes the primary affected requirements.
- OSHA has more requirements affected by the GHS than other US agencies:
  - Cover all acute and chronic hazards.
  - Have requirements for labels and safety data sheets.
  - Cover over 7 million workplaces and 945,000 hazardous chemical products.

What does the ANPR cover?

- Background and History of the Hazard Communication Standard (HCS) and the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)
- Provisions of HCS and GHS

ANPR Covers:

- What provisions of the GHS OSHA expects to adopt
- Public Resources for More Information
- Information OSHA needs from the public

Comment Period

- Comments must be submitted by November 13, 2006.
- OSHA does not anticipate extending the comment period at this time.
- Late comments will be considered until such time as a proposal is issued.

Scope

- HCS covers 23 defined health and physical hazards
- Scope of coverage is similar to GHS
- OSHA expects to maintain a similar broad scope of coverage when adopting the GHS

Exceptions

- Acute toxicity
  - GHS includes 5 categories of acute toxicity effects for each route of entry
  - Broad scope intended to protect children from consumer products
  - OSHA not likely to cover all 5 categories when adopting GHS

Exceptions, cont.

- Environmental Effects
  - GHS covers aquatic toxicity, requires environmental information on safety data sheets
  - OSHA does not have authority for environmental information; will not adopt aquatic tox criteria or require environmental info on data sheets

Other Exceptions?

- All of the other criteria seem to be relevant to the workplace, and OSHA expects to adopt them

Floor of Hazardous Chemicals

- HCS refers to lists of chemicals in hazard determination and uses them to establish a “floor” of covered chemicals
- GHS does not have similar provisions

Detailed Hazard Determination

- The floor was included in HCS to address concerns about self classification by manufacturers
- The more detailed hazard determination provisions in the GHS address those concerns, thus removing the reason for the “floor” provisions

Testing of Chemicals

- The GHS does not require any testing of chemicals to determine their hazards.
- As under the current HCS requirements, chemical manufacturers can base their evaluations on currently available data.
- The criteria for classification of health hazards are test method

Mixture Provisions

- HCS is based on either test data for the mixture as a whole, or a percentage cut-off approach
- GHS employs a tiered approach, allowing extrapolation of data from similar mixtures, an additivity formula for acute tox, and a varied cut-off approach

Labels

- HCS has performance-oriented labels—allows almost any method of conveying hazards
- GHS has specific, harmonized provisions for pictograms, hazard statements, and signal words
- GHS also has suggested precautionary statements that are not yet harmonized, but are expected to be in the future

Major Change in Approach

- Labeling provisions are the biggest difference between HCS and GHS
- Specific approach will require all labels to be modified to comply
- Should improve comprehensibility and facilitate compliance

Safety Data Sheets

- HCS allows any order of information
- GHS specifies the order of information to be used
- Consistent with industry approaches in ANSI and ISO
- Should improve comprehensibility and help with issues regarding accuracy of the information

Request for Input

- To pursue rulemaking, OSHA will have to complete analyses on economic feasibility (costs and benefits), impact on small business, paperwork burden, and technological feasibility
- Analyses for the original HCS will need to be updated to reflect changes in practice

Questions on Current Situation

- How many chemicals are produced, imported, exported or distributed? How many different labels or SDSs are prepared for each product exported?

Current Situation, cont.

- Who is responsible for reviewing data and preparing labels/SDSs?
- What is their professional background?
- Do you rely on labels or SDSs prepared by others (suppliers, vendors, etc.)?

Current Situation, cont.

- How long does it take to complete the review and prepare new labels/SDSs? What is the cost?
- How do the costs relate to revisions based on GHS?
- How does timing affect the cost?

Current Situation, cont.

- How long will it take to update electronic tools used?
- How many employees are trained under hazard communication? How long will it take to re-train? Will standardized info help?
- What savings will result from classifying once and preparing one label/SDS for a product?

Timing

- What should the transition period be? How should it be phased?
- What is the normal update cycle?
- How long will current stockpiles last?
- What other info is relevant to establishing a time period for transition/phasing in of compliance?

Technical Issues

- Do the GHS criteria adequately cover the hazards currently addressed by HCS? Are there other hazards that should be added? (e.g., combustible dust)
- Should OSHA include references to any lists of hazardous chemicals besides those with OSHA PELs? What exposure limits should be included on the SDS?

Technical Issues, cont

- Are there any hazard categories within classes that should not be adopted?
- Should OSHA change other standards to be consistent with changes to physical hazard criteria (e.g., flammable liquids)
- Any other technical issues that should be addressed?

Compliance Assistance

- What products can OSHA provide to help employers and employees? In what form? Addressing what topics?
- What is the best way to distribute such information?
- What do small businesses need?

Guide to the GHS

- A substantive guide to the GHS has been made available on OSHA's web page.
- The guide describes the GHS in some detail to give people a better understanding of its provisions, and thus help them provide better input.

Conclusion

- The ANPR and the Guide can be accessed from OSHA's web page:

http://www.osha.gov

Click on "Hazard Communication" button on right side. ANPR and Guide links are on the portal page for that topic.